



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/052,226	01/17/2002	Michio Takahashi	791_107 CIP	3497
25191	7590	07/13/2004	EXAMINER	
BURR & BROWN PO BOX 7068 SYRACUSE, NY 13261-7068			WILLS, MONIQUE M	
			ART UNIT	PAPER NUMBER
			1746	
DATE MAILED: 07/13/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

g

Office Action Summary

Application No.

10/052,226

Applicant(s)

TAKAHASHI, MICHIO

Examiner

Monique M Wills

Art Unit

1746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

This Office Action is responsive to the Amendment filed April 30, 2004. The rejection of claims 1-5 under 35 U.S.C. 102 (b) as being anticipated by Nemoto et al., U.S. Patent 6,368,750, is overcome. However, claims 1-5 are newly rejected under 35 U.S.C. 102(e) as being anticipated by Hemmer et al., U.S. Patent 6,080,510.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-5 are rejected under 35 U.S.C. 102(e) as being anticipated by Hemmer et al., U.S. Patent 6,080,510.

With respect to claim 1, Hemmer teaches a lithium secondary battery, comprising a lithium manganese oxide cathodic material having a cubic spinel structure and a formula of $\text{Li}_y\text{Me}_x\text{Mn}_{2-x}\text{O}_4$, where Me represents a metal cation from groups IIa, IIIA, IVa, IIV, IIIb, IVb, Vb, VIIb, and VIII of the Periodic Table of Elements, x is $0 \leq x \leq 1$ and y is $0 < y \leq 1.2$. See Abstract. Hemmer exemplifies specific cathodic materials that embrace the instant lithium manganese oxide, including: $\text{Li}(\text{Ti})_{0.1}\text{Mn}_{1.9}\text{O}_4$, where Me is Ti, $y=1$, $x=0.1$ and $x1=1$ (See

Example 2) and $\text{Li}(\text{Ni}_1)_{0.1} \text{Mn}_{1.9}\text{O}_4$, where Me is Ni, $y=1$, $x=0.1$ and $x_1=1$ (See Example 3).

The limitation with respect to the cathodic material having a strength ratio (P_2/P_1 strength ratio) of a primary endothermal peak (P_1) appearing around 950°C and a secondary endothermal peak (P_2) appearing around 1100°C in differential thermal analysis, is 0.5 or less, is considered to be an inherent property of cathodic material of Hemmer, because products of identical chemical composition can not have mutually exclusive properties. A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present. In *re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). In the instant case, the cathodic material of Hemmer possesses said endothermal peak characteristics, because the chemical composition is identical to that of the subject invention.

In *re* claim 2, the Li/Mn ratio is 0.53, when $\text{Li}=1$ and $\text{Mn}=1.9$ as illustrated in Examples 1-3.

As to claims 3-5, the claims are product-by-process claims rendering the same product as the prior art. The claims only differ from Hemmer by their method of production. In accordance with MPEP 2113, “[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.” In *re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). Therefore, since the process steps are not given patentable weight, the method limitations of claims 3-5 do not patentably distinguish the instant cathodic material from that of Hemmer.

Response to Arguments

Applicant's arguments, see pages 2-3, filed April 30, 2004, with respect to the rejection(s) of claim(s) 1-5 under 35 U.S.C. 102(b) as being anticipated by Nemoto have been fully considered and are persuasive. Specifically, Applicant correctly asserts that Nemoto does not constitute prior art relative to the present application under 35 U.S.C. §102(b), because the reference was not patented more than one year prior to the instant application date. In addition, as evidenced by the Declaration submitted April 30, 2004, Nemoto does not constitute prior art under 35 U.S.C. §102 (e), because the subject matter that anticipates any of instant claims 1-5, results solely from the invention by Mr. Takahashi alone. Therefore, the rejection under §102 as being anticipated by Nemoto, has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Hemmer et al., U.S. Patent 6,080,510.

Conclusion

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Monique Wills whose telephone number is (571) 272-1309. The Examiner can normally be reached on Monday-Friday from 8:30am to 5:00 pm.

If attempts to reach Examiner by telephone are unsuccessful, the Examiner's supervisor, Michael Barr, may be reached at 571-272-1414. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1746

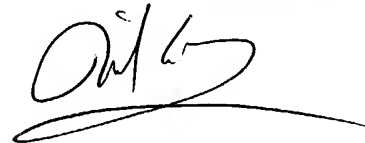
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MW

07/09/04

MICHAEL BARR
PRIMARY EXAMINER

A handwritten signature in black ink, appearing to read 'MB', with a long horizontal flourish extending to the right.